Climate Change and Human Health Literature Portal

National Institute of Environmental Health Sciences

Why is it important to study malaria epidemiology in India?

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Abstract:

Malaria is a major vector-borne disease in India. Based on vast geographic areas with associated topographic and climatic diversity, the variable malaria epidemiology in India is associated with high parasite genetic diversity and rapidly evolving drug resistance, differential distribution of vector species and emerging insecticide resistance and underlying human genetic diversity and past evolutionary histories. Further, changing climatic patterns have possibly changed malaria epidemiology to a great extent. The outcome of these changes is an increased incidence of Plasmodium falciparum over the P. vivax malaria in recent years. Accordingly, the drug and insecticide application policy in India has changed too. The above facts and associated rapid shifting trend of malaria epidemiology makes India a hot-spot for malaria research.

Source: http://dx.doi.org/10.1016/j.pt.2009.06.004

Resource Description

Exposure : ⊠

weather or climate related pathway by which climate change affects health

 Precipitation, Temperature

   Temperature: Fluctuations

Geographic Feature: ⊠

resource focuses on specific type of geography

 None or Unspecified

Geographic Location: ⊠

resource focuses on specific location

 Non-United States

   Non-United States: Asia

     Asian Region/Country: India

Health Impact: ⊠

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Vectorborne Disease

Vectorborne Disease: Mosquito-borne Disease

Mosquito-borne Disease: Malaria

Mitigation/Adaptation: ☒

mitigation or adaptation strategy is a focus of resource

Adaptation

Resource Type: ☒

format or standard characteristic of resource

Policy/Opinion

Timescale: ☒

time period studied

Time Scale Unspecified

Vulnerability/Impact Assessment: ☒

resource focus on process of identifying, quantifying, and prioritizing vulnerabilities in a system

A focus of content